

METHOD AND APPARATUS FOR COMBINED FINGER MANAGEMENT
AND FINGER LOCK FOR A MULTIPATH SIGNALS IN A WIRELESS
COMMUNICATION SYSTEM

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ABSTRACT OF THE DISCLOSURE

A method of managing fingers for multipath signals in a wireless communication device. In one embodiment, the present invention recites receiving multipath signals at a wireless communication device. The present embodiment then acquires one of the multipath signals in a searcher portion of the wireless communication device and determines a signal-to-noise ratio (SNR) level of the one multipath signal. Next, the present embodiment evaluates the multipath signal for categorization into one of a plurality of states and then generates a finger assignment by selectively providing the multipath signal for a demodulation operation based upon its state. The present embodiment then receives the finger assignment from the searcher portion of the communication device and determines a signal-strength for the finger assignment. The present embodiment then enables the finger assignment for a combine operation if the signal-strength for the finger assignment satiates a first signal-strength threshold. The present embodiment also prevents the finger assignment from being deassigned if the signal-strength of the finger assignment satiates a second threshold, wherein the second signal-strength threshold is less than the first signal-strength threshold.